

REMARKS

In the foregoing amendments, claims 1, 2, 8, 13, 17, 18 and 23 were amended. Claims 3, 5, 10, 12, 16, 20 and 22 were canceled together with withdrawn claims 24-34. Amended claim 1 includes limitations from canceled claims 3, 5, 10, 12, 16, 20 and 22. New claim 35 was added to the application and is similar in scope to amended claim 1. The foregoing amendments were made to clarify what was already implied in applicant's claims and these amendments are not narrowing amendments and are not being made for reasons substantially related to patentability presented. Consideration and allowance of claims 1, 2, 4, 6-9, 11, 13-15, 17-19, 21, 23 and 35 are respectfully requested for the following reasons.

The Official action objected to the drawings apparently because there is no Fig. 15 in the application. In this connection, it is respectfully noted that Fig. 15 appears on the sixth sheet of drawings after Figs. 13A and 13B. Since Fig. 15 is present in the application papers, applicant respectfully requests that the objection to the drawings be reconsidered and withdrawn. On the other hand, if there is some other objection to the drawings, it is respectfully requested that any such objection be further explained in the next communication from the examiner.

Claims 1-15 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. patent publication No. 2003/0044639 of Fukuda *et al.* ("Fukuda"). This rejection is set forth on pages 3-7 of the Official action. Claims 16-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fukuda. This rejection is set forth on pages 7-10 of the Official action. Applicant respectfully submits that the inventions defined in claims 1, 2, 4, 6-9, 11, 13-15, 17-19, 21, 23 and 35 are patently distinguishable from the teachings of Fukuda for at least the following reasons.

Present claims 1 and 35 include many structures not contemplated or suggested by the teachings of Fukuda. For example, claims 1 and 35 require that each of the first and second luminescent layers includes a hole transporting material as a host material. In these claims, the first part hole transport layer and the first part electron transport layer are arranged on the corresponding first luminescent layer, and the second part hole transport layer and the second part electron transport layer are arranged on the corresponding second luminescent layer. Claims 1 and 35 further define that the ionization potential of the hole transporting material in one of the first and second luminescent layers is 0.2eV lower than that of the electron transporting material in the electron transport layer. Since each of the first and second luminescent layers includes the hole transporting material as a host material in claims 1 and 35, each luminescent region of the first and second luminescent layers becomes large; and further, the electron transport layer functions as a hole block layer. The aforesaid structures of claims 1 and 35 are not contemplated or suggested by the teachings of Fukuda.

The Official action acknowledged that Fukuda does not disclose that at least one of the first and second luminescent layers includes a hole transporting material, as required in claims 1 and 35. It appeared that the Official action took the position that this structure of applicant's claims would have been obvious to a person skilled in the art, even though the teachings of Fukuda do not suggest and disclose it. Applicant respectfully submits that obviousness cannot be obtained from a vacuum and that the prior art must positively suggest a modification before the alleged modified structure can become obvious.

The structures in present claims 1 and 35 require more than simply including a hole transporting material with at least one of the first and second luminescent layers. For example,

applicant's claims 1 and 35 require that the first part hole transport layer and the first part electron transport layer are arranged on the corresponding first luminescent layer, and the second part hole transport layer and the second part electron transport layer are arranged on the corresponding second luminescent layer. Since the teachings of Fukuda do not disclose or suggest including a hole transporting material, it is impossible for these teachings to disclose or suggest that the first part hole transport layer and the first part electron transport layer are arranged on the corresponding first luminescent layer, and the second part hole transport layer and the second part electron transport layer are arranged on the corresponding second luminescent layer, as required in claims 1 and 35.

The arrangements of applicant's claims provide important and significant advantages over the prior art structures, such as those proposed by Fukuda. In the prior art, the first and second luminescent layers penetrate (or bleed) into each other. In other words, the depositing material from one luminescent layer is mixed into another luminescent layer, which is later deposited. Namely, the later deposited material penetrates into the neighbor luminescent layer. Therefore, the color purity of the neighbor luminescent layer, which is contaminated with the depositing material, is decreased. The arrangements the applicant's claims which includes, *inter alia*, that the first part hole transport layer and the first part electron transport layer are arranged on the corresponding first luminescent layer, and the second part hole transport layer and the second part electron transport layer are arranged on the corresponding second luminescent layer provides a display where the various luminescent layers are better separated, thereby providing a higher purity of color.

Since the teachings of Fukuda do not describe any effects from the arrangement of the respective first and second luminescent layers and the respective electron transport layers, these teachings cannot contemplate or suggest the structure and resulting advantages of the presently claimed invention. In particular, the teachings of Fukuda do not disclose or suggest that the first part hole transport layer and the first part electron transport layer are arranged on the corresponding first luminescent layer, and the second part hole transport layer and the second part electron transport layer are arranged on the corresponding second luminescent layer, as required in present claims 1 and 35.

Furthermore, while the Official action noted that the teachings of Fukuda proposed in Table 1 that the ionization potential of the hole transporting material is 0.2eV lower than that of the electron transporting material, applicant can find no such disclosure regarding the ionization potential in Table 1 of Fukuda. For these reasons, applicant respectfully submits that the inventions defined in claims 1 and 35 are patently distinguishable from the teachings of Fukuda.

In view of the foregoing amendments and remarks, applicant respectfully submits that claims 1, 2, 4, 6-9, 11, 13-15, 17-19, 21, 23 and 35 are patently distinguishable from the teachings of Fukuda within the meaning of 35 U.S.C. §102 or 35 U.S.C. §103. Therefore, applicant respectfully requests that the examiner reconsider and withdraw these rejections.

In view of the foregoing amendments and remarks, favorable consideration and allowance of claims 1, 2, 4, 6-9, 11, 13-15, 17-19, 21, 23 and 35 are respectfully requested. While it is believed that the present response places the application in condition for allowance, should the examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below-listed number to resolve any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which become due, may be charged to our deposit account No. 50-1147.

Respectfully submitted,
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Attachments:

1. Check for \$450
2. Petition for a two-month extension of time